

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:  
Assistant Commissioner for Patents Washington, D.C. 20231  
on Nov. 27, 2000

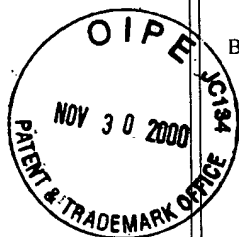
Attorney Docket No.: 02307E-098010US

UC Case No.: 00-0452

PATENT

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DEC 08 2000



By: James Sorino

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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GROUP 2900

PETITION TO CORRECT  
INVENTORSHIP UNDER 37 C.F.R. § 1.48

In re application of:

Zuker, *et al.*

Application No.: 09/510,332

Filed: February 22, 2000

For: T2R, A NOVEL FAMILY OF  
TASTE RECEPTORS

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OFFICE OF PETITIONS

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Applicants petition under 37 C.F.R. § 1.48 to add Mark Hoon as an inventor to the above-identified patent application.

As required by 37 C.F.R. § 1.48, the following are submitted herewith:

- (1) Statement from Mark Hoon stating that it was through error without deceptive intent that he was not named as an inventor in the above-identified patent;
- (2) An executed supplemental declaration in accordance with 37 C.F.R. § 1.63; and
- (3) Written consents from the assignees, The Government of the United States of America as Represented by the Secretary of the Department of Health and Human Services, and The Regents of the University of California.

12/05/2000 GTEFFERA 00000063 201430 09510332

01 FC:122

130.00 CH

Please deduct the petition fee of \$130.00, pursuant to 37 C.F.R. § 1.17(i), from Deposit Account No. 20-1430 of the undersigned. Please charge any additional fees or credit overpayment to the above Deposit Account. This petition is submitted in triplicate.

Respectfully submitted,



Annette S. Parent  
Reg. No. 42,058

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, 8<sup>th</sup> Floor  
San Francisco, California 94111-3834  
Tel: (415) 576-0200  
Fax: (415) 576-0300  
TMB  
SF 1110713 v1

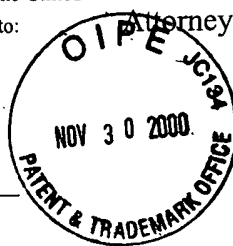
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Assistant Commissioner for Patents  
Washington, D.C. 20231

On NOVEMBER 21, 2000

TOWNSEND and TOWNSEND and CREW LLP

By: Steven Marino



PATENT  
Attorney Docket No.: 02307E-098010US  
UC Case No.: 2000-045-2

**RECEIVED**

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OFFICE OF PETITIONS

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

*Zuker, et al.*

Application No.: 09/510,332

Filed: February 22, 2000

For: T2R, A NOVEL FAMILY OF  
TASTE RECEPTORS

CONSENT OF ASSIGNEE FOR  
CORRECTION OF INVENTORSHIP  
UNDER 37 C.F.R. §1.48

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

The assignee of the above-identified patent application, The Government of the United States of America as Represented by the Secretary of the Department of Health and Human Services, consents to amending the subject application to add Mark Hoon as a joint inventor.

Zuker, *et al.*  
Application No.: 09/510,332  
Page 2



PATENT

In accordance with 37 C.F.R. §3.73(b), a certificate of assignment is enclosed to establish ownership of the above-referenced application by The Government of the United States of America as Represented by the Secretary of the Department of Health and Human Services.

THE GOVERNMENT OF THE UNITED STATES  
OF AMERICA AS REPRESENTED BY THE  
SECRETARY OF THE DEPARTMENT OF  
HEALTH AND HUMAN SERVICES

Date: October 2, 2000

By: Stephen L. Finley

Name: Stephen Finley

Title: Technology Licensing Specialist

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, 8<sup>th</sup> Floor  
San Francisco, California 94111-3834  
Tel: (415) 576-0200  
Fax: (415) 576-0300  
TMB  
SF 1110719 v1

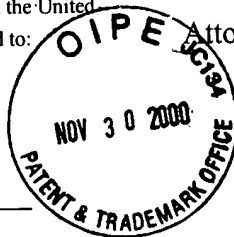
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

Assistant Commissioner for Patents  
Washington, D.C. 20231

On NOVEMBER 27, 2000

TOWNSEND and TOWNSEND and CREW LLP

By: Loren Solino



PATENT  
Attorney Docket No.: 02307E-098010  
UC Case No.: 2000-045-2

**RECEIVED**

DEC 05 2000

**OFFICE OF PETITIONS**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

*Zuker, et al.*

Application No.: 09/510,332

Filed: February 22, 2000

For: T2R, A NOVEL FAMILY OF  
TASTE RECEPTORS

CONSENT OF ASSIGNEE FOR  
CORRECTION OF INVENTORSHIP  
UNDER 37 C.F.R. §1.48

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

The assignee of the above-identified patent application, The Regents of the University of California, consents to amending the subject application to add Mark Hoon as a joint inventor.

In accordance with 37 C.F.R. §3.73(b), a certificate of assignment is enclosed to establish ownership of the above-referenced application by The Regents of The University of California.

THE REGENTS OF THE UNIVERSITY OF  
CALIFORNIA

Date: 09/08/00

By: Linda S. Stevenson

Name: LINDA S. STEVENSON

Title: Manager, Patent Prosecution

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, 8<sup>th</sup> Floor  
San Francisco, California 94111-3834  
Tel: (415) 576-0200  
Fax: (415) 576-0300  
TMB  
SF 1110718 v1



Attorney Docket No. 02307E-098010  
Client Ref. No. 2000-045-2

CERTIFICATE UNDER 37 C.F.R. § 3.73(b)

Applicant: Zuker, et al.

Application No.: 09/510,332

Filed: February 22, 2000

For: T2R, A NOVEL FAMILY OF TASTE RECEPTORS

The Regents of the University of California, a university,

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

certifies that it is assignee of the patent application identified above by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_, Frame(s) \_\_, or for which a copy thereof is attached.

OR

B. ☐ A chain of title from the inventor(s), of the patent application identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_, Frame \_\_, or for which a copy thereof is attached.

2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_, Frame \_\_, or for which a copy thereof is attached.

3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_, Frame \_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☒ Copies of assignments or other documents in the chain of title are attached.

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 9-8-00  
Name: LINDA S. STEVENSON  
Title: MANAGER, Patent Prosecution  
Signature: Linda S. Stevenson



02300E-098010US  
UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

OCTOBER 02, 2000

PTAS  
TOWNSEND AND TOWNSEND AND CREW LLP  
PETER J. FOLLETTE  
TWO EMBARCADERO CENTER, 8TH FLOOR  
SAN FRANCISCO, CA 94111-3834



\*101436656A\*

Asparent

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 07/20/2000

REEL/FRAME: 010993/0291  
NUMBER OF PAGES: 7

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:  
ADLER, JON E.

DOC DATE: 06/30/2000

ASSIGNOR:  
RYBA, NICK

DOC DATE: 07/07/2000

ASSIGNEE:  
HEALTH AND HUMAN SERVICES,  
GOVERNMENT OF THE UNITED STATES  
OF AMERICA, AS REPRESENTED BY  
THE SECRETARY, OF THE DEPARTMENT  
OF, THE  
6011 EXECUTIVE BLVD.  
NATIONAL INSTITUTES OF HEALTH,  
OFFICE OF TECHNOLOGY TRANSFER  
ROCKVILLE, MARYLAND 20852

TOWNSEND & TOWNSEND  
& CREW  
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SERIAL NUMBER: 09510332  
PATENT NUMBER:

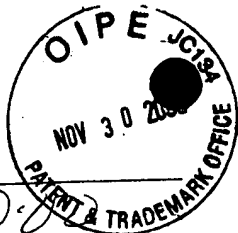
FILING DATE: 02/22/2000  
ISSUE DATE:

NOT FOR RECORDATION



010993/0291 PAGE 2

MARY BENTON, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS



08-17-2000



y Docket No. 02307E-098010US

101436656

U.S. Department of Commerce  
Patent and Trademark OfficeFORM PTO-1595  
(Rev. 6-93)

To the Honorable Asst. Commissioner for Patents. Please record the attached original documents or copy thereof

1. Name of conveying party(ies):

Jon E. Adler and Nick Ryba

OPR/FINANCE

Additional name(s) of conveying parties attached? ☐ Yes  
☒ No.

2. Name and address of receiving party(ies)

Name: THE GOVERNMENT OF THE UNITED STATES OF  
AMERICA as represented by the Secretary of the Department of  
Health and Human ServicesInternal Address: National Institutes of Health  
Office of Technology Transfer

Street Address: 6011 Executive Blvd.

City: Rockville State: MD ZIP: 20852

Additional names and addresses attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other:

Execution Date: June 30, 2000 and July 7, 2000

4. Application Number(s) or Patent Numbers.

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No(s): 09/510,332

B. Patent No(s):

Additional numbers attached? ☐ Yes ☒ No5. Name and address of party to whom correspondence  
concerning document should be mailed:Name: Peter J. Follette  
TOWNSEND AND TOWNSEND AND CREW LLP  
Two Embarcadero Center, 8<sup>th</sup> Floor  
San Francisco, California 94111-3834  
(415) 576-0200

6. Total number of applications and patents involved 1

7. Total fee (37 CFR 3.41): -----\$40.00

☐ Enclosed ☒ Charge Fees to Deposit Account☒ Charge any additional fees associated with this paper or during  
the pendency of this application, or credit any overpayment, to  
deposit account.

8. Deposit account number: 20-1430

DO NOT USE THIS SPACE

9. Statement and signature.

*To the best of my knowledge and belief, the foregoing is true and correct and any attached copy is a true of copy of the  
original document.*Peter J. Follette  
Name of Person Signing  
Signature7/17/00  
Date

Atty Reg. No. 46,213

Total number of pages including cover sheet, attachments and document 8

10. Change Correspondence Address to that of Part 5? ☒ Yes ☐ No

OMB No. 0651-0011 (exp. 4/94)

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Box: Assignments  
Washington, D.C. 20231

08/17/2000 DCOATES 00000034 201430 09510332

01 FC:581 40.00 CH

SF 1115738 v1

ASSIGNMENT

JOINT

WHEREAS, We, Jon E. Adler of 1730 P. Street N.W., Washington D.C. 20036 and Nick Ryba of 9202 Lundigen Court, Bethesda MD 20817, employees of the Department of Health and Human Services at the time the invention was made, have invented (title of invention): **T2R, A NOVEL FAMILY OF TASTE RECEPTORS**, for which an application to the Assistant Commissioner for Patents for grant of Letters Patents of the United States of America has been executed by the undersigned

☐ on (date(s) Declaration signed):

☒ is identified as U.S. Patent Application:  
Serial No. 09/510,332

Filed February 22, 2000; and

WHEREAS, the conditions under which said invention was made are such as to entitle the Government of the United States of America under Paragraph 1(a) of Executive Order 10096, to the entire right, title, and interest herein, both domestic and foreign; and

WHEREAS, the Government of the United States of America is desirous of acquiring all domestic and foreign right, title, and interest in the aforesaid invention described in the aforesaid application for Letters Patent of the United States of America; and

NOW, THEREFORE, to all whom it may concern, be it known that for and in consideration of the premises and other valuable considerations, we the undersigned, have sold, assigned, and transferred and by these presents do sell, assign, and transfer unto The Government of the United States of America as represented by the Secretary of the Department of Health and Human Services (hereinafter THE GOVERNMENT), and his successors, the full and exclusive right, title, and interest throughout the United States of America, its territories and dependencies, and within each and every foreign country in which THE GOVERNMENT elects to file the invention described in the aforesaid application for Letters Patent of the United States of America, and all Letters Patents and Registrations which may be granted on the same in the United States of America and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

AND, we hereby authorize and request the Assistant Commissioner for Patents to issue said Letters Patent to THE GOVERNMENT as assignee of the entire right, title, and interest in and to

the same throughout the United States of America, its territories and dependencies, and within each and every foreign country in which THE GOVERNMENT elects to file, for the sole use for the full term or terms for which said Letters Patent and Registrations may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof which may be granted as fully and entirely as the same would have been held by us, had this assignment not been made;

AND, we hereby warrant that there are no outstanding assignments, grants, liens, encumbrances, or agreements either written, oral, or implied with respect to the aforesaid application for Letters Patent which will impair, diminish, limit, or abridge the interest herein conveyed at the time of the execution of this instrument by us;

AND, we hereby agree to execute any and all applications for Letters Patent in the United States of America and foreign countries, and to furnish and deliver to the Secretary, Department of Health and Human Services, upon request, all data and documents, and to execute any papers which may be necessary for the prosecution of any application or applications of Letters Patent or for THE GOVERNMENT to exercise its rights granted hereunder, including communicating to THE GOVERNMENT, its representatives or agents, any facts relating to said invention, including evidence for interference purposes, or for other proceedings, whenever requested, to testify in any interference or other proceedings, whenever requested, and to execute and deliver on request all lawful papers required to make any of the foregoing provisions effective, and likewise make these provisions binding upon our heirs, legal representatives, administrators and assigns, and we shall assist THE GOVERNMENT in every way as may be requested in protecting said invention, provided that any expense of extending such assistance shall be paid by THE GOVERNMENT.

The undersigned hereby grants THE GOVERNMENT or the law firm of Townsend and Townsend and Crew LLP, the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

\_\_\_\_\_  
Jon E. Adler

\_\_\_\_\_  
Date

SIGNATURE WITNESSED BY:

(1) Date: \_\_\_\_\_

\_\_\_\_\_  
Signature of Witness 1

(2) Date: \_\_\_\_\_

\_\_\_\_\_  
Signature of Witness 2

Nick Ryba  
\_\_\_\_\_  
Nick Ryba

7/7/00  
\_\_\_\_\_  
Date

SIGNATURE WITNESSED BY:

(1) Date: July 7, 00

[Signature]  
\_\_\_\_\_  
Signature of Witness 1

(2) Date: July 7, 2000

[Signature]  
\_\_\_\_\_  
Signature of Witness 2

ASSIGNMENT

JOINT

WHEREAS, We, Jon E. Adler of 1730 P. Street N.W., Washington D.C. 20036 and Nick Ryba of 9202 Lundigen Court, Bethesda MD 20817, employees of the Department of Health and Human Services at the time the invention was made, have invented (title of invention): **T2R, A NOVEL FAMILY OF TASTE RECEPTORS**, for which an application to the Assistant Commissioner for Patents for grant of Letters Patents of the United States of America has been executed by the undersigned

☐ on (date(s) Declaration signed):

☒ is identified as U.S. Patent Application:  
Serial No. 09/510,332

Filed February 22, 2000; and

WHEREAS, the conditions under which said invention was made are such as to entitle the Government of the United States of America under Paragraph 1(a) of Executive Order 10096, to the entire right, title, and interest herein, both domestic and foreign; and

WHEREAS, the Government of the United States of America is desirous of acquiring all domestic and foreign right, title, and interest in the aforesaid invention described in the aforesaid application for Letters Patent of the United States of America; and

NOW, THEREFORE, to all whom it may concern, be it known that for and in consideration of the premises and other valuable considerations, we the undersigned, have sold, assigned, and transferred and by these presents do sell, assign, and transfer unto The Government of the United States of America as represented by the Secretary of the Department of Health and Human Services (hereinafter THE GOVERNMENT), and his successors, the full and exclusive right, title, and interest throughout the United States of America, its territories and dependencies, and within each and every foreign country in which THE GOVERNMENT elects to file the invention described in the aforesaid application for Letters Patent of the United States of America, and all Letters Patents and Registrations which may be granted on the same in the United States of America and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

AND, we hereby authorize and request the Assistant Commissioner for Patents to issue said Letters Patent to THE GOVERNMENT as assignee of the entire right, title, and interest in and to

the same throughout the United States of America, its territories and dependencies, and within each and every foreign country in which THE GOVERNMENT elects to file, for the sole use for the full term or terms for which said Letters Patent and Registrations may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof which may be granted as fully and entirely as the same would have been held by us, had this assignment not been made;

AND, we hereby warrant that there are no outstanding assignments, grants, liens, encumbrances, or agreements either written, oral, or implied with respect to the aforesaid application for Letters Patent which will impair, diminish, limit, or abridge the interest herein conveyed at the time of the execution of this instrument by us;

AND, we hereby agree to execute any and all applications for Letters Patent in the United States of America and foreign countries, and to furnish and deliver to the Secretary, Department of Health and Human Services, upon request, all data and documents, and to execute any papers which may be necessary for the prosecution of any application or applications of Letters Patent or for THE GOVERNMENT to exercise its rights granted hereunder, including communicating to THE GOVERNMENT, its representatives or agents, any facts relating to said invention, including evidence for interference purposes, or for other proceedings, whenever requested, to testify in any interference or other proceedings, whenever requested, and to execute and deliver on request all lawful papers required to make any of the foregoing provisions effective, and likewise make these provisions binding upon our heirs, legal representatives, administrators and assigns, and we shall assist THE GOVERNMENT in every way as may be requested in protecting said invention, provided that any expense of extending such assistance shall be paid by THE GOVERNMENT.

The undersigned hereby grants THE GOVERNMENT or the law firm of Townsend and Townsend and Crew LLP, the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.


IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Jon E. Adler  
Jon E. Adler

Date 30 JUNE 2000

SIGNATURE WITNESSED BY:

(1) Date: 30 June 2000

  
Signature of Witness 1

(2) Date: 30 June 2000

[Signature]

Signature of Witness 2

Nick Ryba

Date \_\_\_\_\_

SIGNATURE WITNESSED BY:

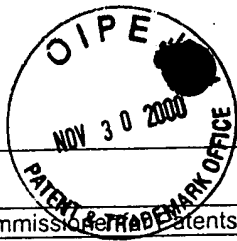
(1) Date: \_\_\_\_\_

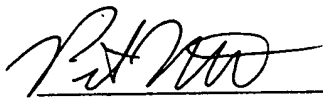
Signature of Witness 1

(2) Date: \_\_\_\_\_

Signature of Witness 2





FORM PTO-1595 (Rev. 6-93)		Recordation Form Cover Sheet (Patents Only)		U.S. Department of Commerce Patent and Trademark Office	
To the Honorable Asst. Commissioner for Patents. Please record the attached original documents or copy thereof					
1. Name of conveying party(ies):  Jon E. Adler and Nick Ryba  Additional name(s) of conveying parties attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No.		2. Name and address of receiving party(ies)  Name: THE GOVERNMENT OF THE UNITED STATES OF AMERICA as represented by the Secretary of the Department of Health and Human Services  Internal Address: National Institutes of Health Office of Technology Transfer  Street Address: 6011 Executive Blvd.  City: Rockville State: MD ZIP: 20852  Additional names and addresses attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
3. Nature of conveyance:  <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger  <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name  <input type="checkbox"/> Other:  Execution Date: June 30, 2000 and July 7, 2000					
4. Application Number(s) or Patent Numbers.  If this document is being filed together with a new application, the execution date of the application is:  A. Patent Application No(s): 09/510,332 B. Patent No(s):  Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
5. Name and address of party to whom correspondence concerning document should be mailed:  Name: Peter J. Follette TOWNSEND AND TOWNSEND AND CREW LLP Two Embarcadero Center, 8 <sup>th</sup> Floor San Francisco, California 94111-3834 (415) 576-0200		6. Total number of applications and patents involved 1  7. Total fee (37 CFR 3.41): -----\$40.00  <input type="checkbox"/> Enclosed <input checked="" type="checkbox"/> Charge Fees to Deposit Account  <input checked="" type="checkbox"/> Charge any additional fees associated with this paper or during the pendency of this application, or credit any overpayment, to deposit account.  8. Deposit account number: 20-1430			
DO NOT USE THIS SPACE					
9. Statement and signature.  <i>To the best of my knowledge and belief, the foregoing is true and correct and any attached copy is a true of copy of the original document.</i>  <div style="display: flex; justify-content: space-between;"><div><u>Peter J. Follette</u> Name of Person Signing  Atty Reg. No. 46,213</div><div style="text-align: center;"> Signature</div><div style="text-align: right;"><u>7/17/00</u> Date</div></div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"><div>Total number of pages including cover sheet, attachments and document</div><div>8</div></div>					
10. Change Correspondence Address to that of Part 5? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
OMB No. 0651-0011 (exp. 4/94)					
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DEC 05 2000

OFFICE OF PETITIONS



Attorney Docket No. 02307E-098010US  
DHHS Ref. No.: E-160-00/1

CERTIFICATE UNDER 37 C.F.R. § 3.73(b)

Applicant: Zuker, et al.

Application No.: 09/510,332

Filed: February 22, 2000

For: T2R, A NOVEL FAMILY OF TASTE RECEPTORS

The Government of the United States as Represented by the Secretary of the Department of Health and Human Services, a government agency,

(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

certifies that it is assignee of the patent application identified above by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_\_, Frame(s) \_\_\_, or for which a copy thereof is attached.

OR

B. ☐ A chain of title from the inventor(s), of the patent application identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the Patent and Trademark Office at Reel \_\_\_, Frame \_\_\_, or for which a copy thereof is attached.

2. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the Patent and Trademark Office at Reel \_\_\_, Frame \_\_\_, or for which a copy thereof is attached.

3. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the Patent and Trademark Office at Reel \_\_\_, Frame \_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☒ Copies of assignments or other documents in the chain of title are attached.

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: October 2, 2000

Name: Stephen Finley

Title: Technology Licensing Specialist

Signature: Stephen L. Finley

SF 1112416 v1

ASSIGNMENT

JOINT

WHEREAS, We, Jon E. Adler of 1099 Turquoise Street, Apt. 15, San Diego, CA 92037, Nick Ryba of 9202 Lundigen Court, Bethesda MD 20817, and Mark Hoon of 4218 Warner Street, Kensington, Maryland 20895, employees of the Department of Health and Human Services at the time the invention was made, have invented (title of invention): **T2R, A NOVEL FAMILY OF TASTE RECEPTORS**, for which an application to the Assistant Commissioner for Patents for grant of Letters Patents of the United States of America has been executed by the undersigned

☐ on (date(s) Declaration signed):

☒ is identified as U.S. Patent Application:

Serial No. 09/510,332, Filed February 22, 2000; and

Serial No. 09/393,634, Filed September 10, 1999; and

WHEREAS, the conditions under which said invention was made are such as to entitle the Government of the United States of America under Paragraph 1(a) of Executive Order 10096, to the entire right, title, and interest herein, both domestic and foreign; and

WHEREAS, the Government of the United States of America is desirous of acquiring all domestic and foreign right, title, and interest in the aforesaid invention described in the aforesaid application for Letters Patent of the United States of America; and

NOW, THEREFORE, to all whom it may concern, be it known that for and in consideration of the premises and other valuable considerations, we the undersigned, have sold, assigned, and transferred and by these presents do sell, assign, and transfer unto The Government of the United States of America as represented by the Secretary of the Department of Health and Human Services (hereinafter THE GOVERNMENT), and his successors, the full and exclusive right, title, and interest throughout the United States of America, its territories and dependencies, and within each and every foreign country in which THE GOVERNMENT elects to file the invention described in the aforesaid application for Letters Patent of the United States of America, and all Letters Patents and Registrations which may be granted on the same in the United States of America and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

NOT FOR RECORDATION

AND, we hereby authorize and request the Assistant Commissioner for Patents to issue said Letters Patent to THE GOVERNMENT as assignee of the entire right, title, and interest in and to the same throughout the United States of America, its territories and dependencies, and within each and every foreign country in which THE GOVERNMENT elects to file, for the sole use for the full term or terms for which said Letters Patent and Registrations may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof which may be granted as fully and entirely as the same would have been held by us, had this assignment not been made;

AND, we hereby warrant that there are no outstanding assignments, grants, liens, encumbrances, or agreements either written, oral, or implied with respect to the aforesaid application for Letters Patent which will impair, diminish, limit, or abridge the interest herein conveyed at the time of the execution of this instrument by us;

AND, we hereby agree to execute any and all applications for Letters Patent in the United States of America and foreign countries, and to furnish and deliver to the Secretary, Department of Health and Human Services, upon request, all data and documents, and to execute any papers which may be necessary for the prosecution of any application or applications of Letters Patent or for THE GOVERNMENT to exercise its rights granted hereunder, including communicating to THE GOVERNMENT, its representatives or agents, any facts relating to said invention, including evidence for interference purposes, or for other proceedings, whenever requested, to testify in any interference or other proceedings, whenever requested, and to execute and deliver on request all lawful papers required to make any of the foregoing provisions effective, and likewise make these provisions binding upon our heirs, legal representatives, administrators and assigns, and we shall assist THE GOVERNMENT in every way as may be requested in protecting said invention, provided that any expense of extending such assistance shall be paid by THE GOVERNMENT.

The undersigned hereby grants THE GOVERNMENT or the law firm of Townsend and Townsend and Crew LLP, the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

\_\_\_\_\_  
Jon E. Adler

\_\_\_\_\_  
Date

SIGNATURE WITNESSED BY:

(1) Date: \_\_\_\_\_

\_\_\_\_\_  
Signature of Witness 1

(2) Date: \_\_\_\_\_

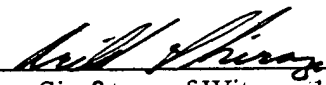
\_\_\_\_\_  
Signature of Witness 2

\_\_\_\_\_  
Nick Ryba

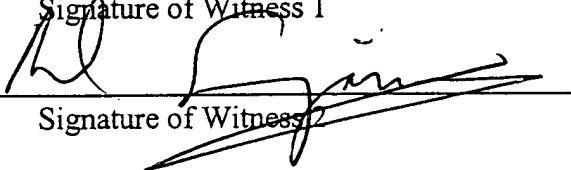
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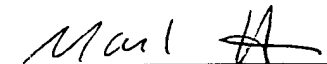
SIGNATURE WITNESSED BY:

(1) Date: 07-Sep-00

  
Signature of Witness 1

(2) Date: 07/Sep/00

  
Signature of Witness 2

  
Mark Hoon

9/7/00  
Date

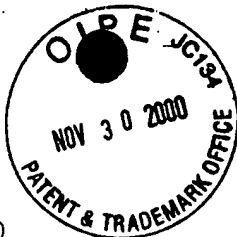
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(1) Date: \_\_\_\_\_

\_\_\_\_\_  
Signature of Witness 1

(2) Date: \_\_\_\_\_

\_\_\_\_\_  
Signature of Witness 2



02307E-098010US  
UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

OCTOBER 02, 2000

PTAS

TOWNSEND AND TOWNSEND AND CREW LLP  
PETER J. FOLLETTE  
TWO EMBARCADERO CENTER, 8TH FLOOR  
SAN FRANCISCO, CA 94111-3834



\*101436656A\*

AsParent

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 07/20/2000

REEL/FRAME: 010993/0291  
NUMBER OF PAGES: 7

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

ADLER, JON E.

DOC DATE: 06/30/2000

ASSIGNOR:

RYBA, NICK

DOC DATE: 07/07/2000

ASSIGNEE:

HEALTH AND HUMAN SERVICES,  
GOVERNMENT OF THE UNITED STATES  
OF AMERICA, AS REPRESENTED BY  
THE SECRETARY, OF THE DEPARTMENT  
OF, THE  
6011 EXECUTIVE BLVD.  
NATIONAL INSTITUTES OF HEALTH,  
OFFICE OF TECHNOLOGY TRANSFER  
ROCKVILLE, MARYLAND 20852

SERIAL NUMBER: 09510332

PATENT NUMBER:

FILING DATE: 02/22/2000

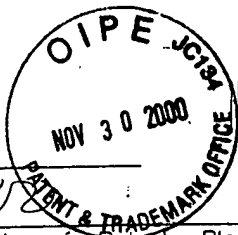
ISSUE DATE:

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& CREW  
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010993/0291 PAGE 2

MARY BENTON, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS



08-17-2000



Docket No. 02307E-098010US

101436656

FORM PTO-1595  
(Rev. 6-93)U.S. Department of Commerce  
Patent and Trademark Office

To the Honorable Asst. Commissioner for Patents. Please record the attached original documents or copy thereof

1. Name of conveying party(ies):

Jon E. Adler and Nick Ryba

OPR/FINANCE

Additional name(s) of conveying parties attached? ☐ Yes  
☒ No.

3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other:

Execution Date: June 30, 2000 and July 7, 2000

2. Name and address of receiving party(ies)

Name: THE GOVERNMENT OF THE UNITED STATES OF  
AMERICA as represented by the Secretary of the Department of  
Health and Human ServicesInternal Address: National Institutes of Health  
Office of Technology Transfer

Street Address: 6011 Executive Blvd.

City: Rockville State: MD ZIP: 20852

Additional names and addresses attached? ☐ Yes ☒ No

4. Application Number(s) or Patent Numbers.

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No(s): 09/510,332

B. Patent No(s):

Additional numbers attached? ☐ Yes ☒ No5. Name and address of party to whom correspondence  
concerning document should be mailed:Name: Peter J. Follette  
TOWNSEND AND TOWNSEND AND CREW LLP  
Two Embarcadero Center, 8<sup>th</sup> Floor  
San Francisco, California 94111-3834  
(415) 576-0200

6. Total number of applications and patents involved 1

7. Total fee (37 CFR 3.41): \$40.00

☐ Enclosed ☒ Charge Fees to Deposit Account☒ Charge any additional fees associated with this paper or during  
the pendency of this application, or credit any overpayment, to  
deposit account.

8. Deposit account number: 20-1430

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9. Statement and signature.

*To the best of my knowledge and belief, the foregoing is true and correct and any attached copy is a true of copy of the  
original document.*Peter J. Follette  
Name of Person Signing

Signature

Date

Atty Reg. No. 46,213

Total number of pages including cover sheet, attachments and document 8

10. Change Correspondence Address to that of Part 5? ☒ Yes ☐ No

OMB No. 0651-0011 (exp. 4/94)

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Mail documents to be recorded with required cover to:

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Box: Assignments  
Washington, D.C. 20231

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DEC 05 2000

OFFICE OF PETITIONS

08/17/2000 DCOATES 00000034 201430 09510332

01 FC:581 40.00 CH

SF 1115738 v1



ASSIGNMENT

JOINT

WHEREAS, We, Jon E. Adler of 1730 P. Street N.W., Washington D.C. 20036 and Nick Ryba of 9202 Lundigen Court, Bethesda MD 20817, employees of the Department of Health and Human Services at the time the invention was made, have invented (title of invention): **T2R, A NOVEL FAMILY OF TASTE RECEPTORS**, for which an application to the Assistant Commissioner for Patents for grant of Letters Patents of the United States of America has been executed by the undersigned

☐ on (date(s) Declaration signed):

☒ is identified as U.S. Patent Application:

Serial No. 09/510,332

Filed February 22, 2000; and

WHEREAS, the conditions under which said invention was made are such as to entitle the Government of the United States of America under Paragraph 1(a) of Executive Order 10096, to the entire right, title, and interest herein, both domestic and foreign; and

WHEREAS, the Government of the United States of America is desirous of acquiring all domestic and foreign right, title, and interest in the aforesaid invention described in the aforesaid application for Letters Patent of the United States of America; and

NOW, THEREFORE, to all whom it may concern, be it known that for and in consideration of the premises and other valuable considerations, we the undersigned, have sold, assigned, and transferred and by these presents do sell, assign, and transfer unto The Government of the United States of America as represented by the Secretary of the Department of Health and Human Services (hereinafter THE GOVERNMENT), and his successors, the full and exclusive right, title, and interest throughout the United States of America, its territories and dependencies, and within each and every foreign country in which THE GOVERNMENT elects to file the invention described in the aforesaid application for Letters Patent of the United States of America, and all Letters Patents and Registrations which may be granted on the same in the United States of America and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

AND, we hereby authorize and request the Assistant Commissioner for Patents to issue said Letters Patent to THE GOVERNMENT as assignee of the entire right, title, and interest in and to

the same throughout the United States of America, its territories and dependencies, and within each and every foreign country in which THE GOVERNMENT elects to file, for the sole use for the full term or terms for which said Letters Patent and Registrations may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof which may be granted as fully and entirely as the same would have been held by us, had this assignment not been made;

AND, we hereby warrant that there are no outstanding assignments, grants, liens, encumbrances, or agreements either written, oral, or implied with respect to the aforesaid application for Letters Patent which will impair, diminish, limit, or abridge the interest herein conveyed at the time of the execution of this instrument by us;

AND, we hereby agree to execute any and all applications for Letters Patent in the United States of America and foreign countries, and to furnish and deliver to the Secretary, Department of Health and Human Services, upon request, all data and documents, and to execute any papers which may be necessary for the prosecution of any application or applications of Letters Patent or for THE GOVERNMENT to exercise its rights granted hereunder, including communicating to THE GOVERNMENT, its representatives or agents, any facts relating to said invention, including evidence for interference purposes, or for other proceedings, whenever requested, to testify in any interference or other proceedings, whenever requested, and to execute and deliver on request all lawful papers required to make any of the foregoing provisions effective, and likewise make these provisions binding upon our heirs, legal representatives, administrators and assigns, and we shall assist THE GOVERNMENT in every way as may be requested in protecting said invention, provided that any expense of extending such assistance shall be paid by THE GOVERNMENT.

The undersigned hereby grants THE GOVERNMENT or the law firm of Townsend and Townsend and Crew LLP, the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

\_\_\_\_\_  
Jon E. Adler

\_\_\_\_\_  
Date

SIGNATURE WITNESSED BY:

(1) Date: \_\_\_\_\_

\_\_\_\_\_  
Signature of Witness 1

(2) Date: \_\_\_\_\_

\_\_\_\_\_  
Signature of Witness 2

Nick Ryba  
Nick Ryba

7/7/00  
Date

SIGNATURE WITNESSED BY:

(1) Date: July 7, 00

[Signature]  
Signature of Witness 1

(2) Date: July 7, 2000

[Signature]  
Signature of Witness 2

ASSIGNMENT

JOINT

WHEREAS, We, **Jon E. Adler of 1730 P. Street N.W., Washington D.C. 20036** and **Nick Ryba of 9202 Lundigen Court, Bethesda MD 20817**, employees of the Department of Health and Human Services at the time the invention was made, have invented (title of invention): **T2R, A NOVEL FAMILY OF TASTE RECEPTORS**, for which an application to the Assistant Commissioner for Patents for grant of Letters Patents of the United States of America has been executed by the undersigned

☐ on (date(s) Declaration signed):

☒ is identified as U.S. Patent Application:  
Serial No. 09/510,332

Filed February 22, 2000; and

WHEREAS, the conditions under which said invention was made are such as to entitle the Government of the United States of America under Paragraph 1(a) of Executive Order 10096, to the entire right, title, and interest herein, both domestic and foreign; and

WHEREAS, the Government of the United States of America is desirous of acquiring all domestic and foreign right, title, and interest in the aforesaid invention described in the aforesaid application for Letters Patent of the United States of America; and

NOW, THEREFORE, to all whom it may concern, be it known that for and in consideration of the premises and other valuable considerations, we the undersigned, have sold, assigned, and transferred and by these presents do sell, assign, and transfer unto The Government of the United States of America as represented by the Secretary of the Department of Health and Human Services (hereinafter THE GOVERNMENT), and his successors, the full and exclusive right, title, and interest throughout the United States of America, its territories and dependencies, and within each and every foreign country in which THE GOVERNMENT elects to file the invention described in the aforesaid application for Letters Patent of the United States of America, and all Letters Patents and Registrations which may be granted on the same in the United States of America and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

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the same throughout the United States of America, its territories and dependencies, and within each and every foreign country in which THE GOVERNMENT elects to file, for the sole use for the full term or terms for which said Letters Patent and Registrations may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof which may be granted as fully and entirely as the same would have been held by us, had this assignment not been made;

AND, we hereby warrant that there are no outstanding assignments, grants, liens, encumbrances, or agreements either written, oral, or implied with respect to the aforesaid application for Letters Patent which will impair, diminish, limit, or abridge the interest herein conveyed at the time of the execution of this instrument by us;

AND, we hereby agree to execute any and all applications for Letters Patent in the United States of America and foreign countries, and to furnish and deliver to the Secretary, Department of Health and Human Services, upon request, all data and documents, and to execute any papers which may be necessary for the prosecution of any application or applications of Letters Patent or for THE GOVERNMENT to exercise its rights granted hereunder, including communicating to THE GOVERNMENT, its representatives or agents, any facts relating to said invention, including evidence for interference purposes, or for other proceedings, whenever requested, to testify in any interference or other proceedings, whenever requested, and to execute and deliver on request all lawful papers required to make any of the foregoing provisions effective, and likewise make these provisions binding upon our heirs, legal representatives, administrators and assigns, and we shall assist THE GOVERNMENT in every way as may be requested in protecting said invention, provided that any expense of extending such assistance shall be paid by THE GOVERNMENT.

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IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Jon E. Adler  
Jon E. Adler

Date 30 JUNE 2000

SIGNATURE WITNESSED BY:

(1) Date: 30 June 2000

  
Signature of Witness 1

(2) Date: 30 June 2000

Donna M. O'Callahan  
Signature of Witness 2

---

Nick Ryba

Date \_\_\_\_\_

SIGNATURE WITNESSED BY:

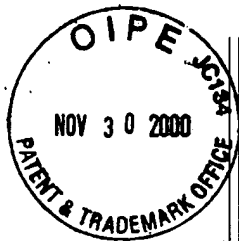
(1) Date: \_\_\_\_\_

Signature of Witness 1

(2) Date: \_\_\_\_\_

Signature of Witness 2





I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

Assistant Commissioner for Patents  
Washington, D.C. 20231

On NOVEMBER 27, 2000

TOWNSEND and TOWNSEND and CREW LLP

By: Sharen Sorino

PATENT  
Attorney Docket No.: 02307E-098010  
UC Case No.: 2000-045-2

**RECEIVED**

DEC 05 2000

**OFFICE OF PETITIONS**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Zuker, *et al.*

DECLARATION UNDER 37 C.F.R. §1.48

Application No.: 09/510,332

Filed: February 22, 2000

For: T2R, A NOVEL FAMILY OF  
TASTE RECEPTORS

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

I, Mark Hoon, state that it was through error without deceptive intent that I was not named as an inventor in the above-referenced patent application.

I agree to the correction of inventorship currently requested by the assignees of the above-referenced patent to include myself, Mark Hoon, as a joint inventor.

Dated: 9/7/00

By Mark Hoon  
Mark Hoon

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, 8<sup>th</sup> Floor  
San Francisco, California 94111-3834  
Tel: (415) 576-0200/Fax: (415) 576-0300

SF 1110720 v1





### DECLARATION

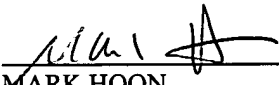
As a below named inventor, I declare that:

My residence, post office address and citizenship are as stated below next to my name; I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: **T2R, A NOVEL FAMILY OF TASTE RECEPTORS** the specification of which \_\_\_\_ is attached hereto or **X** was filed on **February 22, 2000** as Application No. **09/510,332** and was amended on \_\_\_\_\_ (if applicable).

I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56. I claim foreign priority benefits under Title 35, United States Code, Section 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

Full Name of Inventor 1:	Last Name: <b>ZUKER</b>	First Name: <b>CHARLES</b>	Middle Name or Initial: <b>S.</b>	
Residence & Citizenship:	City: <b>San Diego</b>	State/Foreign Country: <b>California</b>	Country of Citizenship: <b>USA</b>	
Post Office Address:	Post Office Address: <b>4778 Thurston Place</b>	City: <b>San Diego</b>	State/Country: <b>California</b>	Postal Code: <b>92130</b>
Full Name of Inventor 2:	Last Name: <b>ADLER</b>	First Name: <b>JON</b>	Middle Name or Initial: <b>E.</b>	
Residence & Citizenship:	City: <b>San Diego</b>	State/Foreign Country: <b>California</b>	Country of Citizenship: <b>USA</b>	
Post Office Address:	Post Office Address: <b>1099 Turquoise Street #15</b>	City: <b>San Diego</b>	State/Country: <b>California</b>	Postal Code: <b>92037</b>
Full Name of Inventor 3:	Last Name: <b>RYBA</b>	First Name: <b>NICK</b>	Middle Name or Initial:	
Residence & Citizenship:	City: <b>Bethesda</b>	State/Foreign Country: <b>Maryland</b>	Country of Citizenship: <b>United Kingdom</b>	
Post Office Address:	Post Office Address: <b>9202 Lundigen Court</b>	City: <b>Bethesda</b>	State/Country: <b>Maryland</b>	Postal Code: <b>20817</b>
Full Name of Inventor 4:	Last Name: <b>MUELLER</b>	First Name: <b>KEN</b>	Middle Name or Initial:	
Residence & Citizenship:	City: <b>San Diego</b>	State/Foreign Country: <b>California</b>	Country of Citizenship: <b>USA</b>	
Post Office Address:	Post Office Address: <b>9585 Genesee Avenue, Apt. H1</b>	City: <b>San Diego</b>	State/Country: <b>California</b>	Postal Code: <b>92121</b>
Full Name of Inventor 5:	Last Name: <b>HOON</b>	First Name: <b>MARK</b>	Middle Name or Initial:	
Residence & Citizenship:	City: <b>Kensington</b>	State/Foreign Country: <b>Maryland</b>	Country of Citizenship: <b>United Kingdom</b>	
Post Office Address:	Post Office Address: <b>4218 Warner Street</b>	City: <b>Kensington</b>	State/Country: <b>Maryland</b>	Postal Code: <b>20895</b>

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Signature of Inventor 1  _____ CHARLES S. ZUKER	Signature of Inventor 2  _____ JON E. ADLER	Signature of Inventor 3  _____ NICK RYBA
Date	Date	Date
Signature of Inventor 4  _____ KEN MUELLER	Signature of Inventor 5   _____ MARK HOON	
Date	Date 9/7/00	

SF 1111010 v1



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DEC 05 2000

DECLARATION

OFFICE OF PETITIONS

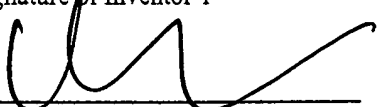
As a below named inventor, I declare that:

My residence, post office address and citizenship are as stated below next to my name; I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: **T2R, A NOVEL FAMILY OF TASTE RECEPTORS** the specification of which \_\_\_\_\_ is attached hereto or X was filed on February 22, 2000 as Application No. 09/510,332 and was amended on \_\_\_\_\_ (if applicable).

I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56. I claim foreign priority benefits under Title 35, United States Code, Section 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

Full Name of Inventor 1:	Last Name: <b>ZUKER</b>	First Name: <b>CHARLES</b>	Middle Name or Initial: <b>S.</b>	
Residence & Citizenship:	City: <b>San Diego</b>	State/Foreign Country: <b>California</b>	Country of Citizenship: <b>USA</b>	
Post Office Address:	Post Office Address: <b>4778 Thurston Place</b>	City: <b>San Diego</b>	State/Country: <b>California</b>	Postal Code: <b>92130</b>
Full Name of Inventor 2:	Last Name: <b>ADLER</b>	First Name: <b>JON</b>	Middle Name or Initial: <b>E.</b>	
Residence & Citizenship:	City: <b>San Diego</b>	State/Foreign Country: <b>California</b>	Country of Citizenship: <b>USA</b>	
Post Office Address:	Post Office Address: <b>1099 Turquoise Street #15</b>	City: <b>San Diego</b>	State/Country: <b>California</b>	Postal Code: <b>92037</b>
Full Name of Inventor 3:	Last Name: <b>RYBA</b>	First Name: <b>NICK</b>	Middle Name or Initial:	
Residence & Citizenship:	City: <b>Bethesda</b>	State/Foreign Country: <b>Maryland</b>	Country of Citizenship: <b>United Kingdom</b>	
Post Office Address:	Post Office Address: <b>9202 Lundigen Court</b>	City: <b>Bethesda</b>	State/Country: <b>Maryland</b>	Postal Code: <b>20817</b>
Full Name of Inventor 4:	Last Name: <b>MUELLER</b>	First Name: <b>KEN</b>	Middle Name or Initial:	
Residence & Citizenship:	City: <b>San Diego</b>	State/Foreign Country: <b>California</b>	Country of Citizenship: <b>USA</b>	
Post Office Address:	Post Office Address: <b>9585 Genesee Avenue, Apt. H1</b>	City: <b>San Diego</b>	State/Country: <b>California</b>	Postal Code: <b>92121</b>
Full Name of Inventor 5:	Last Name: <b>HOON</b>	First Name: <b>MARK</b>	Middle Name or Initial:	
Residence & Citizenship:	City: <b>Kensington</b>	State/Foreign Country: <b>Maryland</b>	Country of Citizenship: <b>United Kingdom</b>	
Post Office Address:	Post Office Address: <b>4218 Warner Street</b>	City: <b>Kensington</b>	State/Country: <b>Maryland</b>	Postal Code: <b>20895</b>

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Signature of Inventor 1  CHARLES S. ZUKER	Signature of Inventor 2 _____ JON E. ADLER	Signature of Inventor 3 _____ NICK RYBA
Date 9/12/00	Date	Date
Signature of Inventor 4 _____ KEN MUELLER	Signature of Inventor 5 _____ MARK HOON	
Date	Date	

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### DECLARATION

As a below named inventor, I declare that:


My residence, post office address and citizenship are as stated below next to my name; I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: **T2R, A NOVEL FAMILY OF TASTE RECEPTORS** the specification of which \_\_\_\_\_ is attached hereto or **X** was filed on **February 22, 2000** as Application No. **09/510,332** and was amended on \_\_\_\_\_ (if applicable).

I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56. I claim foreign priority benefits under Title 35, United States Code, Section 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

Full Name of Inventor 1:	Last Name: <b>ZUKER</b>	First Name: <b>CHARLES</b>	Middle Name or Initial: <b>S.</b>	
Residence & Citizenship:	City: <b>San Diego</b>	State/Foreign Country: <b>California</b>	Country of Citizenship: <b>USA</b>	
Post Office Address:	Post Office Address: <b>4778 Thurston Place</b>	City: <b>San Diego</b>	State/Country: <b>California</b>	Postal Code: <b>92130</b>
Full Name of Inventor 2:	Last Name: <b>ADLER</b>	First Name: <b>JON</b>	Middle Name or Initial: <b>E.</b>	
Residence & Citizenship:	City: <b>San Diego</b>	State/Foreign Country: <b>California</b>	Country of Citizenship: <b>USA</b>	
Post Office Address:	Post Office Address: <b>1099 Turquoise Street #15</b>	City: <b>San Diego</b>	State/Country: <b>California</b>	Postal Code: <del>92107</del> <b>92109</b>
Full Name of Inventor 3:	Last Name: <b>RYBA</b>	First Name: <b>NICK</b>	Middle Name or Initial:	
Residence & Citizenship:	City: <b>Bethesda</b>	State/Foreign Country: <b>Maryland</b>	Country of Citizenship: <b>United Kingdom</b>	
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Full Name of Inventor 4:	Last Name: <b>MUELLER</b>	First Name: <b>KEN</b>	Middle Name or Initial:	
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Full Name of Inventor 5:	Last Name: <b>HOON</b>	First Name: <b>MARK</b>	Middle Name or Initial:	
Residence & Citizenship:	City: <b>Kensington</b>	State/Foreign Country: <b>Maryland</b>	Country of Citizenship: <b>United Kingdom</b>	
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J.E.A.

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Signature of Inventor 1  _____ CHARLES S. ZUKER	Signature of Inventor 2   _____ JON E. ADLER	Signature of Inventor 3  _____ NICK RYBA
Date	Date 8 SEPTEMBER 2000	Date
Signature of Inventor 4  _____ KEN MUELLER	Signature of Inventor 5  _____ MARK HOON	
Date	Date	

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# DECLARATION

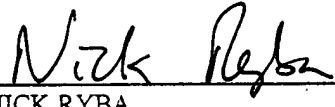
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Residence & Citizenship:	City: <b>San Diego</b>	State/Foreign Country: <b>California</b>	Country of Citizenship: <b>USA</b>	
Post Office Address:	Post Office Address: <b>4778 Thurston Place</b>	City: <b>San Diego</b>	State/Country: <b>California</b>	Postal Code: <b>92130</b>
Full Name of Inventor 2:	Last Name: <b>ADLER</b>	First Name: <b>JON</b>	Middle Name or Initial: <b>E.</b>	
Residence & Citizenship:	City: <b>San Diego</b>	State/Foreign Country: <b>California</b>	Country of Citizenship: <b>USA</b>	
Post Office Address:	Post Office Address: <b>1099 Turquoise Street #15</b>	City: <b>San Diego</b>	State/Country: <b>California</b>	Postal Code: <b>92037</b>
Full Name of Inventor 3:	Last Name: <b>RYBA</b>	First Name: <b>NICK</b>	Middle Name or Initial:	
Residence & Citizenship:	City: <b>Bethesda</b>	State/Foreign Country: <b>Maryland</b>	Country of Citizenship: <b>United Kingdom</b>	
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Full Name of Inventor 4:	Last Name: <b>MUELLER</b>	First Name: <b>KEN</b>	Middle Name or Initial:	
Residence & Citizenship:	City: <b>San Diego</b>	State/Foreign Country: <b>California</b>	Country of Citizenship: <b>USA</b>	
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Full Name of Inventor 5:	Last Name: <b>HOON</b>	First Name: <b>MARK</b>	Middle Name or Initial:	
Residence & Citizenship:	City: <b>Kensington</b>	State/Foreign Country: <b>Maryland</b>	Country of Citizenship: <b>United Kingdom</b>	
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Signature of Inventor 1  _____ CHARLES S. ZUKER	Signature of Inventor 2  _____ JON E. ADLER	Signature of Inventor 3   _____ NICK RYBA
Date  _____	Date  _____	Date 9/7/00
Signature of Inventor 4  _____ KEN MUELLER	Signature of Inventor 5  _____ MARK HOON	
Date  _____	Date  _____	

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Full Name of Inventor 2:	Last Name: <b>ADLER</b>	First Name: <b>JON</b>	Middle Name or Initial: <b>E.</b>	
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Full Name of Inventor 4:	Last Name: <b>MUELLER</b>	First Name: <b>KEN</b>	Middle Name or Initial:	
Residence & Citizenship:	City: <b>San Diego</b>	State/Foreign Country: <b>California</b>	Country of Citizenship: <b>USA</b>	
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Full Name of Inventor 5:	Last Name: <b>HOON</b>	First Name: <b>MARK</b>	Middle Name or Initial:	
Residence & Citizenship:	City: <b>Kensington</b>	State/Foreign Country: <b>Maryland</b>	Country of Citizenship: <b>United Kingdom</b>	
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Signature of Inventor 1  _____ CHARLES S. ZUKER	Signature of Inventor 2  _____ JON E. ADLER	Signature of Inventor 3  _____ NICK RYBA
Date	Date	Date
Signature of Inventor 4  <i>Ken Mueller</i> _____ KEN MUELLER	Signature of Inventor 5  _____ MARK HOON	
Date <i>September 7, 2000</i>	Date	

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